

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/110909 A1

(51) International Patent Classification?: **B65H 19/22**

Valkkinen (FI). TYNKKYNNEN, Topi [FI/FI]; Oolannintie 2 D 25, FI-01520 Vantaa (FI).

(21) International Application Number:

PCT/FI2004/050086

(74) Agent: **TAMPEREEN PATENTTITOIMISTO OY**; Hermiankatu 12 B, FI-33720 Tampere (FI).

(22) International Filing Date: 10 June 2004 (10.06.2004)

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language:

Finnish

(26) Publication Language:

English

(30) Priority Data:

20030906 17 June 2003 (17.06.2003) FI

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

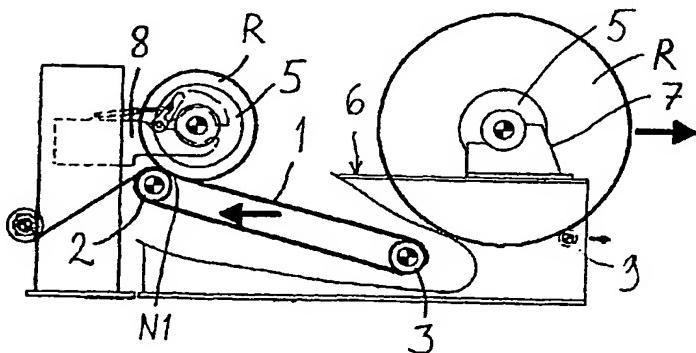
(71) Applicant: Metso Paper, Inc. [FI/FI]; Fabianinkatu 9 A, FI-00130 Helsinki (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): NAATTI, Ilkka [FI/FI]; Pitkämäentie 53 C B, FI-00670 Helsinki (FI). KOJO, Teppo [FI/FI]; Alhontie 10, FI-04600 Mäntsälä (FI). MÄKINEN, Risto [FI/FI]; Koivikonnaari 24, FI-04600 Mäntsälä (FI). RIJHELÄ, Vesa [FI/FI]; Kytötie 57 B as.2, FI-04430 Järvenpää (FI). KEMPPAINEN, Matti [FI/FI]; Temmonkaari 2, FI-05400 Jokela (FI). TUOMINEN, Olli [FI/FI]; Littuskiventie 107, FI-37420

[Continued on next page]

(54) Title: METHOD IN REELING UP AND A REEL-UP



A1

WO 2004/110909

(57) Abstract: A paper web is continuously reeled into reels around rotating reeling cores. Before a change of reel a new empty reeling core (5) is brought to the change station into change connection with the paper web (W) going to the old reel (R), and when the old reel (R) is full, the web is changed in a change event to travel to the periphery of the new reeling core (5) and a primary reeling is started where the web is guided to form a roll around the reeling core (5) through a reeling nip (N1) between the loop of an endless supporting member (1) and the reeling core. From the primary reeling a change is made to secondary reeling, where a portion of the supporting member (1) carrying the web brings the web to the reel, and the web moves over to the reel in a reeling nip (N) between said portion and the outer periphery of the reel. During the secondary reeling at least in some stage the reeling core (5) is transferred in relation to the loop of the supporting member (1) according to the increase of the diameter of the reel (R) in such a manner that the position of said reeling nip (N) moves forward on the web-carrying portion of the endless supporting member (1) in the travel direction of said portion. A first guide roll (2) of the web-carrying portion of the loop of the endless supporting member (1) is transferred in the direction of the periphery of the reeling core (5) so that the distance of the reeling nip (N1) located between the reeling core (5) and the loop of the supporting member (1) from the first guide roll (2) changes in the primary reeling.



Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.